

the present invention.

Figs. 6A to 6E are views for explaining multicode transmission of packet data according to the embodiment 2 of the present invention.

Fig. 7 is a block diagram showing an inner structure of a mobile station and a base station according to embodiment 3 of the present invention.

Fig. 8 is a flowchart for explaining multicode transmission of packet data according to the embodiment 3 of the present invention.

Fig. 9 is a view for explaining multicode transmission of packet data according to embodiment 4 of the present invention.

Figs. 10A to 10E are views for more specifically explaining the multicode transmission of the packet data according to the embodiment 4 of the present invention.

Fig. 11 is a flowchart for explaining transmission start control processing according to embodiment 5 of the present invention.

Figs. 12A to 12E are views for explaining multicode transmission of down packet data according to embodiment 6 of the present invention.

Figs. 13A to 13F are views for explaining multicode transmission of up packet data according to the embodiment 6 of the present invention.

Figs. 14A to 14E are views for explaining multicode transmission of packet data according to embodiment 7 of the present invention.

Figs. 15A to 15E are views for explaining multicode transmission of packet data according to the embodiment 7 of the present invention.

Figs. 16A to 16E are views for explaining multicode transmission of packet data according to the embodiment 7 of the present invention.

Fig. 17 is a flowchart for explaining transmission stop control processing according to embodiment 8 of the present invention.

Fig. 18 is a flowchart for explaining transmission stop control processing according to embodiment 9 of the present invention.

Figs. 19A to 19E are views for explaining multicode transmission of packet data according to embodiment 9 of the present invention.

Fig. 20 is a flowchart for explaining transmission stop control processing according to embodiment 10 of the present invention.

Fig. 21 is a view for explaining conventional multicode transmission.

BEST MODE FOR CARRYING OUT THE INVENTION

Hereinafter, embodiments of the present invention will be described in detail with reference to the accompanying drawings.

Embodiment 1

Fig. 1 is a conceptual view showing the whole structure of a CDMA mobile communication system according to embodiment 1 of the present invention. This CDMA mobile communication system includes a mobile station 1 and a base station 2. The mobile station 1 is constituted by a mobile telephone or the like. The base station 2 forms an intrinsic cell 3. This CDMA mobile communication system realizes mobile communication by multicode transmission of packet data by wireless between the base station 2 and the mobile station 1 existing in the cell 3 of the base station 2.

More specifically, the mobile station 1 and the base station 2 perform wireless communication using a data channel DCH (DPDCH: Dedicated Physical Data CHannel) and a control channel CCH (DPCCH: Dedicated Physical Control CHannel). More specifically, the base station 2 transmits down packet data and control information to the mobile station 1 through a down data channel IDCH and a down control channel ICCH, respectively. The mobile station 1 transmits up packet data and control information to the base station 2 through an up data channel ODCH and an up control channel OCCH, respectively.

In the case where packet data is transmitted, the mobile